

10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95

WHAT IS CLAIMED IS:

1. A recording medium on which information is to be recorded by an information recording apparatus, wherein prior to the recording of the information therein, there are recorded in advance at least:

5 identification information for identifying the information recording apparatus for recording the information onto the recording medium; and

recording parameter information containing optimization information for optimizing a recording state in the record processing executed by the information recording apparatus specified by the identification information.

2. The recording medium according to claim 1, wherein the recording parameter information comprises at least:

first recording parameter used when executing the record processing with a first recording speed; and

20 second recording parameter used when executing the record processing with a second recording speed which is faster than the first recording speed.

3. The recording medium according to claim 1, wherein the recording medium comprises at least:

25 an information recording area where the information is to be recorded; and

a control information recording area where recording control information used for controlling the record processing is to be recorded;

the identification information and the recording parameter information being recorded in the control information area in advance.

4. The recording medium according to claim 1, wherein
5 standard recording parameter information is further recorded for executing the record processing in a standard recording state.

10 5. The recording medium according to claim 1, wherein in the identification information and the recording parameter information, the identical identification information and the identical recording parameter information are recorded repeatedly.

15 6. The recording medium according to claim 1, wherein a plurality of sets comprising the identification information and the recording parameter information which are in a corresponding relation are recorded.

20 7. The recording medium according to claim 1, wherein the record processing is a record processing executed optically, and

the recording parameter information is a recording parameter information for optimizing a shape of a recording pit formed on the recording medium by executing the record processing.

25 8. An information recording apparatus for executing the record processing onto a recording medium on which information is to be recorded by information recording apparatus, wherein prior to the recording of the information therein, there are recorded in advance at

least: identification information for identifying the information recording apparatus for recording the information onto the recording medium; and recording parameter information containing optimization information for optimizing a recording state in the record processing executed by the information recording apparatus specified by the identification information, said apparatus comprising:

a storage device for storing the identification information for identifying the information recording apparatus;

10 a detection device for detecting the identification information and the recording parameter information from the recording medium prior to the recording of the information;

15 a comparison device for comparing the detected identification information to the stored identification information; and

20 a recording device for recording the information onto the recording medium while optimizing the recording state by using the detected recording parameter information when the detected information coincides with the stored identification information.

9. The information recording apparatus according to claim 8,
25 further comprising a type-corresponding recording parameter information storage device for storing type-corresponding recording parameter information as the recording parameter information corresponding to a type of the recording medium,

wherein if the detected identification information does not coincide with the stored identification information, the storage device records the information onto the recording medium by the use of the stored type-corresponding recording parameter information.

10. The information recording apparatus according to claim 8,
further comprising a standard recording parameter information storage
device for detecting/storing standard recording parameter information for
executing the record processing in a standard recording state,

5 wherein if the detected identification information does not
coincide with the stored identification information, the storage device
records the information onto the recording medium by the use of the
stored standard recording parameter information.

10
11. An information recording method which is executed in an
information recording apparatus for executing record processing onto a
recording medium on which information is to be recorded by the
information recording apparatus, wherein prior to the recording of the
information therein, there are recorded in advance at least: identification
information for identifying the information recording apparatus for
recording the information onto the recording medium; and recording
parameter information containing optimization information for optimizing
a recording state in the record processing executed by the information
recording apparatus specified by the identification information, said
method comprising the processes of:

20
25 detecting the identification information and the recording
parameter information from the recording medium prior to the recording
of the information;

comparing the detected identification information to the
identification information stored in advance in the information recording
apparatus and for identifying the information recording apparatus; and

recording the information onto the recording medium while optimizing the recording state by using the detected recording parameter information when the detected identification information coincides with the stored identification information.

5

12. An information recording medium in which a recording program is recorded in such a manner that the recording program can be read by a recording computer contained in an information recording apparatus for executing record processing onto a recording medium on which information is to be recorded by the information recording apparatus, wherein prior to the recording of the information therein, there are recorded in advance at least: identification information for identifying the information recording apparatus for recording the information onto the recording medium; and recording parameter information containing optimization information for optimizing a recording state in the record processing executed by the information recording apparatus specified by the identification information, said program causing the recording computer to function as:

20 a storage device for storing the identification information for identifying the information recording apparatus;

a detection device for detecting the identification information and the recording parameter information from the recording medium prior to the recording of the information;

25 a comparison device for comparing the detected identification information to the stored identification information; and

a recording device for recording the information onto the recording medium while optimizing the recording state by using the

detected recording parameter information when the detected identification information coincides with the stored identification information.

13. A computer data signal embodied in a carrier wave and
5 representing executable instructions comprising instructions for executing
record processing onto a recording medium on which information is to be
recorded by the information recording apparatus, wherein prior to the
recording of the information therein, there are recorded in advance at
least: identification information for identifying the information recording
apparatus for recording the information onto the recording medium; and
recording parameter information containing optimization information for
optimizing a recording state in the record processing executed by the
information recording apparatus specified by the identification information,
said computer data signal causing the recording computer to function as:

15 a storage device for storing the identification information for
identifying the information recording apparatus;

a detection device for detecting the identification information
and the recording parameter information from the recording medium prior
to the recording of the information;

20 a comparison device for comparing the detected identification
information to the stored identification information; and

a recording device for recording the information onto the
recording medium while optimizing the recording state by using the
detected recording parameter information when the detected identification
25 information coincides with the stored identification information.